

In the Claims:

1. (Previously presented) A network node comprising:
 - a communication unit for the implementation of a communication protocol for communication with other network nodes via a communication medium,
 - a bus monitor, and
 - a bus driver, wherethe communication unit and the bus monitor each mutually independently implement an access time schedule contained in a configuration data record, and each make available, in accordance with the access time schedule, a release signal for the bus driver,
 - the bus driver evaluates these two release signals and, in the event that the two release signals do not coincide, blocks the access of the network node to the communication medium.
2. (Previously presented) A network node as claimed in claim 1, characterized in that the communication unit supplies, in addition, a transmission request signal to the bus driver, as a function of which the bus driver activates its transmission stage if no blockage of access to the communication medium is present.
3. (Previously presented) A network node as claimed in claim 1, characterized in that the release signals of the communication unit and the bus monitor are coded inversely to one another.
4. (Previously presented) A network node as claimed in claim 1, characterized in that the evaluation of the two release signals is undertaken in the bus driver under the influence of a low-pass filter.
5. (Previously presented) A network node as claimed in claim 4, characterized in that the low-pass filter is of configurable design.

6. (Previously presented) A network node as claimed in claim 1, characterized in that error-state detection generated in the bus driver is resettable from the outside.

7. (Previously presented) A network node as claimed in claim 1, characterized in that error-state detection generated in the bus driver is signaled to the outside.

8. (Previously presented) A network node as claimed in claim 1, characterized in that the bus monitor and the bus driver are integrated into one unit.

9. (Previously presented) A network with network nodes as claimed in claim 1, wherein the network nodes communicate with each other via a single communications link that consists of the communication medium.

10. (Previously presented) A network as claimed in claim 9, in which redundant network channels are provided, wherein a bus monitor and a bus driver are assigned to each network channel in each network node.

11. (Previously presented) A network node for communication with other network nodes via a communication medium, the network node comprising:

a bus driver configured to evaluate two release signals for equality of the release information made available to it;

two separate units provided in the network node, which, mutually independently, each implement an access time schedule to generate the release signal; and

wherein, in the event that the release signals do not coincide, the bus driver is configured to block the access of the network node to the communication medium.

12. (Previously presented) A network device for communicating with other network devices over a communications medium, the device comprising:

a bus monitor to independently generate a release signal in response to a time schedule from a configuration data record, the time schedule specifying times at which each network device can exclusively communicate on the communications medium;

a communication circuit to independently generate another release signal in response to the time schedule, and to implement a communication protocol for communication with the other network nodes via the communication medium;

a bus driver to evaluate the independently-generated release signals and to block access to the communications medium in response to the evaluation indicating that the release signals do not coincide.

13. (Previously presented) The device of claim 12, wherein

the network device communicates with said other network devices over a single communications medium, and

the bus driver evaluates the independently-generated release signals to ensure that both signals match one another to mitigate a network access condition resulting from an improperly-generated release signal.

14. (Previously presented) The device of claim 12, wherein

the communication circuit supplies a transmission request signal to the bus driver, and

the bus driver transmits over the communications medium in response to the transmission request signal and to the evaluation not indicating that the release signals do not coincide.

15. (Previously presented) The device of claim 12, wherein the bus monitor and the communication circuit generate release signals that are coded inversely, relative to one another.

16. (Previously presented) The device of claim 12, wherein the bus driver includes a low-pass filter that is used to evaluate the two release signals.

17. (Previously presented) A network device for time-based communication with other network devices over a communications medium according to a time schedule

configuration record that specifies times at which each network device can exclusively communicate on the communications medium, the network device comprising:

a bus monitor configured to independently generate a release signal according to the time schedule;

a communication circuit configured to independently generate another release signal according to the time schedule, and to implement a communication protocol for communication with the other network nodes via the communications medium; and

a bus driver configured to

evaluate the timing of both of the independently-generated release signals,

and

block the network device from accessing the communications medium in response to the evaluation indicating that the release signals do not coincide in time.

18. (Previously presented) The device of claim 17, wherein

the network device communicates with said other network devices over a single communications medium,

the communication circuit is configured to supply a transmission request signal to the bus driver, and

the bus driver is configured to transmit over the communications medium in response to the transmission request signal, in response to the evaluation indicating that the release signals do not coincide in time.

19. (Previously presented) The device of claim 17, wherein the bus monitor and the communication circuit respectively generate release signals that are coded inversely, relative to one another.

20. (Previously presented) The device of claim 17, wherein the bus driver includes a low-pass filter and is configured to evaluate the timing of both of the independently-generated release signals using the low-pass filter to suppress short-term time differences between the two release signals, and to determine that the independently-generated release signals coincide in time based upon the suppressed short-term time differences.